REMARKS

Applicants appreciate the courtesies extended by the Examiner during the interview conducted on January 15, 2008 and the withdrawal of the finality of the last action. In this response the new grounds of rejection are addressed and overcome. The Examiner is also requested to consider and make of record the information submitted in the attached information disclosure statement. Reconsideration and allowance are respectfully requested.

Claims 5 and 6 stand objected to noting a dependency informality. The suggestion proposed by the Examiner is adopted.

Claims 1, 3, and 6 stand rejected under 35 U.S.C. §112, second paragraph. This rejection is respectfully traversed.

Claim 1 has been amended so that it no longer refers to "may be", and thus, that rejection should not be overcome. Applicants disagree that the term "IEEE 802.11-type" is a trademark or trade name. IEEE 802.11 refers to the well-known set of standards established by IEEE for wireless communications, and especially for wireless local area network (WLAN) communications. This term is well understood and commonly used in the art and is no more objectionable in a claim than referring to the metric system as a standard. One need only look at far as the Balogh reference to see multiple references to the IEEE 802.11 standard, see, e.g., 0012 and 0017-0023. Withdrawal of the rejection of claims 3 and 6 is requested.

The claims remain rejected under 35 U.S.C. §103 based on Nuemiller and Balogh. This rejection is respectfully traversed.

In the ad hoc mode, a node A may receive HELLO or similar probing/scanning messages from a node B without node B receiving user packets from node A because certain kinds of

hardware treat broadcast and uni-cast packets differently. The problem is that an ad hoc node may try to establish communication routes through the ad hoc network via one or more nodes that do not route packets. Another problem is that even when it is possible to route user packets to a neighboring node, the quality of the link between the neighboring nodes can be very poor, which may result in errors, retransmissions, lower throughput, and perhaps, route failure.

The technology in claims 1 and 4 relates to WLAN ad hoc networks. A node maintains a list or table of other nodes within the ad hoc network which can be used for forwarding messages within that network. The received signal strengths or qualities (e.g., SNR) of signals from nodes in the list are analyzed differently from the received signal strengths or qualities from nodes not on the routing node list. The received signal strength or quality from a listed node is allowed to vary somewhat within a predetermined range above a first threshold value to accommodate normal fluctuations associated with a moving node. But if the received signal strength or quality of the listed node falls below the first threshold level, then that node is removed from the list. In contrast, the received signal strength or quality of an unlisted node must exceed a second higher threshold level in order for that unlisted node to be added to the routing table. This arrangement provides a robust system where the list of nodes in the ad hoc routing table is updated based on changing channel conditions to ensure good signal quality routing connections.

Nuemiller (US 7,180,875) teaches listing many nodes including nodes having a low SNR. See, for example, col. 6, lines 17-43. Listing "weak" nodes contrasts with what is described in claims 1 and 4 where the first node lists strong candidates in its ad hoc network routing table so that packets from the first node are routed to one or more "strong" neighboring nodes, each strong neighboring node in turn having a list of strong candidates neighboring it, and so forth. The Examiner admits that Nuemiller lacks "comparison of predetermined level/conditions."

Balogh's (US 2001/0024953) main goal is to keep "the connection in the same network as long as possible." See 0005. Passing reference is made in 0035 that scanning of stored information sets may be done for ad-hoc mode networks with the comparison being of terminal identities to information sets. Balogh's main focus is on selecting a first access point that has "the same network name as the currently serving access point" and a second access point with "a different network name" are selected. In 0039, Balogh states: "The terminal MS then checks 402 the network names of the available access points based on the collected information. According to an embodiment, the MS compares the network names of available access points advantageously to the network name settings of the stored information sets and drops access points with network names not described in any of the network name settings 403." As shown in Figure 4, a first access point with the same network name is selected (step 404) and a second access point with a different network name is selected (step 405).

The "connection attributes" of the first and second access points are compared to each other. The signal level is one connection attribute associated with the first and second access points. As explained in 0040: "If only signal levels are considered, the signal levels of different access points are simply compared and the access point with the highest signal level is the access point with the best connection attributes." The Examiner does not point out where Balogh discloses the claimed first and second predetermined signal strength thresholds. Performing one relative comparison where the signal strengths of a first access point signal and a second access point signal are compared to the each other as in Balogh is not the same as performing two separate comparisons as claimed where the signal strength of the first access point signal is compared to a first predetermined signal strength threshold and the signal strength of the second

access point signal is compared to a second predetermined signal strength threshold greater than the first predetermined signal strength threshold.

The Examiner identifies paragraph 0050 in Balogh as allegedly teaching a second comparison level is greater than a first comparison level. First, that is not what is recited in amended independent claims 1 and 4. Second, paragraph 0050 relates to a user interface which allows a user to accept a new connection. There is not reference to any predetermined comparison levels let alone to the two separate comparisons to the first and second predetermined signal strength thresholds where the second predetermined signal strength threshold greater than the first predetermined signal strength threshold..

In addition, claim 1 relates to maintaining a table of other nodes within the network which can be used for forwarding messages within an ad hoc network using certain criteria for adding and dropping nodes in the table. That is different than deciding which access point to use in order to access a network, which is what Balogh describes.

It also remains for the Examiner to explain how Balogh's access point selection for establishing a connection with a terminal will "effectively and efficiently handl[e] fading between mobile wireless user terminals...with minimal overhead and packet loss" in the Nuemiller system.

The application is in condition for allowance. An early notice to that effect is respectfully requested. But if the Examiner elects to maintain the prior art rejection, the Examiner is requested to specifically identify and explain what in Balogh corresponds to the first predetermined signal strength threshold, the second predetermined signal strength threshold greater than the first predetermined signal strength threshold, the first claimed comparison of the first signal, and the second separate claimed comparison of the first signal.

Respectfully submitted,

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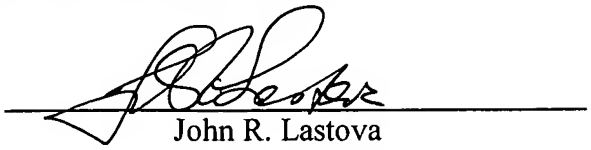
By: 
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